

## Real estate markets

# U.S. housing market: the good, the bad, the questions

- The U.S. housing market has likely bottomed and is showing signs of recovery, particularly in selected geographies.
- The recent positive data notwithstanding, the sector faces a number of headwinds and questions that must be addressed before a true, robust recovery can occur.
- We believe investment opportunities in distressed housing remain but would be wary of chasing the publicly traded homebuilders at current prices.

The housing market's despair of the past five years has turned to near euphoria, at least based on the performance of the homebuilding stocks, as further evidence is pointing towards a gradual improvement in the housing market. As Chart 1 indicates, the SNL Financial homebuilder index has significantly outperformed the S&P 500 year-to-date. We certainly agree that there are reasons for optimism regarding a stabilization and gradual recovery in housing. That said, there are a number of headwinds and unanswered questions that must be considered in gauging the breadth and depth of the recovery.

We continue to believe the housing market has bottomed and in the process of gradually improving on a national basis. We readily acknowledge that certain markets have rebounded smartly off their depressed lows including coastal California, Phoenix and portions of Florida. However, we believe it would be premature and erroneous to extrapolate these local and regional trends broadly, as specific market dynamics including limited well-located land supply, investor buyer demand and geographic population shifts tend to be more market specific.

From an investment perspective we are still believers in the opportunity of purchasing distressed real estate for rental purposes. The high levels of negative equity combined with an increased likelihood of a pick up in foreclosure activity should lead to more distressed inventory becoming available for purchase.

**Jonathan Woloshin**, CFA, analyst, UBS FS jonathan.woloshin@ubs.com, +1 212 713 3635

## Chart 1 - SNL Homebuilding Index vs. The S&P 500 YTD as of 13 July 2012



Source: SNL Financial

We would be wary of chasing the stocks of the homebuilders at these levels. We believe the group is very extended as momentum investors and short sellers covering their positions have pushed the builder's shares to very aggressive valuation levels. We believe the homebuilding stocks are discounting a robust recovery scenario that is not supported by the macro environment.

#### The Good

Home prices and affordability – After declining for nearly five years home prices appear to have bottomed and have recently begun to show some slight increase. As can be seen in Chart 2, the Corelogic national home price index excluding distressed sales turned positive in February 2012 while the index including distressed sales recently turned positive as well. In addition, between March and May 2012, the National Association of Realtors (NAR) reported sequential increases in all measured price improvement categories and sequential declines in those homes demonstrating price declines greater than 5% (Chart 3). Further, given the generation low mortgage rates (discussed below), affordability, as measured by the NAR affordability index is well above the pre-bubble levels (Chart 4).

**Mortgage Rates** - As can be seen in Chart 5, the 30 year fixed mortgage rate is at a 40 year low. Based on macroeconomic commentary from the Federal Reserve, it appears mortgage rates are likely to stay favorable for the foreseeable future.

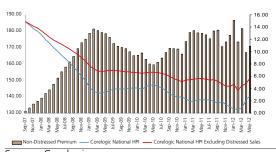
**Order rates** – Over the past four quarters public homebuilders have posted very robust order growth rates (Chart 6). These growth rates must be taken in context as the previous year's figures were quite depressed and we do not believe it would be appropriate to extrapolate these growth rates. However, we do believe many of the public homebuilders have weathered the downturn quite well and will continue to gain share.

**Supply** – One factor that has clearly helped pricing stabilize has been the draw down of inventory across a number of markets as well as reduced supply of homes for sale. As can be seen in Chart 7, months supply of homes available for sale is approximately 6 months which historically has been representative of a fairly balanced market. This figure is down more than 50% from the post bubble highs of almost 13 months back in 2010.

**Time on market** – The spring selling season has seen a compression in the time a home spends on the market, particularly for lower priced homes. According to the NAR, the percentage of homes selling within a month of listing increased 10 percentage points between May 2011 and May 2012 while the percentage of those homes on the market for more than 12 months decreased slightly over the same time frame (Chart 8). In addition, over the past year, the percentage of homes on the market for more than six months declined eight percentage points to 23% (Chart 9).

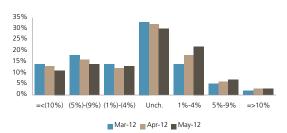
**Delinquency rates** – After peaking at more than 10% in 2010, overall mortgage delinquency rates have declined to 7.4%. Of note in these figures is the 200 bps decline in 90+ day delinquency rates to 3.1% over this time period (Chart 10).

Chart 2 - Corelogic National Home Price Index



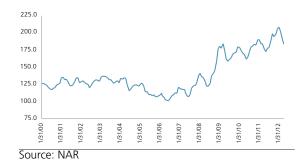
Source: Corelogic

Chart 3 - National Association of Realtors Survey of Home Price Trends March-May 2012



Source: NAR

Chart 4 - National Association of Realtors Affordability Index



**Chart 5- 30 Year Fixed Mortgage Rates** 



Source: Freddie Mac

**Apartment rents** – Since bottoming in 2009, the robust growth in apartment rents across a majority of markets in the U.S. (Chart 11) has altered the rent/buy calculus for many potential buyers, particularly for those markets where home prices have declined precipitously (including Phoenix, Atlanta, Las Vegas, Orlando, Tampa and California's Inland Empire). In a number of markets it is actually less expensive on an after-tax monthly basis to own a home as opposed to rent a three bedroom apartment.

Market Psychology - We do believe that psychology, both positive and negative, plays an important factor in the direction of the housing market. We have suggested for some time that the best thing that could happen to housing from a psychological perspective is an increase in prices. We believe this helps reinforce the "i've missed the bottom" phenomenon among potential buyers. In Chart 12 we used the National Association of Homebuilders Housing Market Index (HMI) as a proxy for market psychology. The HMI is a monthly survey of NAHB members designed to take the pulse of the housing industry, especially single family housing. Although depressed as compared to historical levels, the HMI has moved strongly off the bottom and has been very strong the past several months. The current positive psychology could become a self fulfilling prophecy for those buyers that have been sitting on the sidelines.

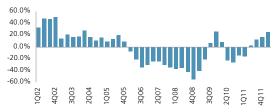
#### The Bad

**Negative equity** – Negative equity (mortgage exceeds home value) continues to plague the housing market. According to data compiled by Corelogic, almost 23% of the homes in the U.S that have a mortgage are in a negative equity position. More concerning is the distribution of negative equity. As can be seen in Chart 13, more than 40% of the underwater mortgages have a loan-to-value in excess of 125%. Despite some of the improvement in the housing market, negative equity trends have remained stubbornly high (Chart 14). In addition to the negative equity figures, 17.2% of the homes have 15% or less equity (Chart 15). This dearth of equity has the potential to limit the move up activity of existing homeowners.

**Tighter underwriting standards** – The post housing bubble increase in mortgage underwriting standards is positive from the perspective of the long-term health of the housing market. In the nearterm however, the more restrictive underwriting standards are limiting mortgage issuance to only the most qualified borrowers. As can be seen in Chart 16, 80% of the Agency qualified mortgages issued in 2012 were based on a FICO score in excess of 700 compared to a pre-bubble average of 65% with a FICO score in excess of 700.

**Homeownership rates** – After peaking at 69.2% in 2004, homeownership rates have retraced to their long-term average of approximately 65% (Chart 17). The reversion to the long-term mean is not particularly surprising. That said, the sector's myriad challenges could lead the ownership rate to continue declining below the long-term average. Each 50bps decline in homeownership rates represent approximately 570,000 households seeking shelter outside of owning a home (based on 113mn households).

**Chart 6 - Public Homebuilder YOY Order Rates** 



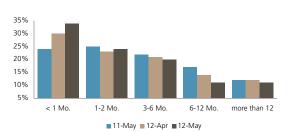
Source: Company Documents

Chart 7 - Months Supply of Existing Homes for Sale



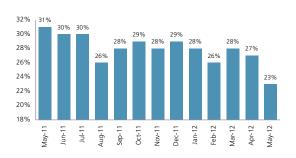
Source: National Association of Realtors, U.S. Census

**Chart 8 - Time on Market to Sell Trends** 



Source: National Association of Realtors

Chart 9 - % of Homes on the Market for at Least 6 Months



Source: National Association of Realtors

**Appraisal challenges** – Another casualty of the housing bust was the lax appraisal standards witnessed during the housing bubble. The days of "what appraisal do you need" have been supplanted by a very stringent, arms-length appraisal process that is much more conservative and exacting. As can be seen in Chart 18 more than 30% of realtors surveyed by the NAR reported appraisal issues that led to either a canceled or delayed contract or a lower negotiated price.

**Unemployment** – The U.S. unemployment rate remains elevated at 8.2%. Although the current rate is almost 200bps below the 2009 peak of 10%, the decline in the unemployment rate has been highly correlated to a decline in the labor force participation rate (Chart 19). Although some of the decline in the labor force participation rate can be explained by an aging population and an increase in disability claims, the true unemployment rate is likely being understated by not factoring in the loss of workforce participants.

**Foreclosures** – Pursuant to the expiration of the foreclosure moratorium and the announcement of the settlement between various government agencies and the largest mortgage underwriters, the pace of foreclosures has picked up, with monthly foreclosure filings once again in excess of 200,000 (Chart 20). Given both the (apparent) stabilization in prices as well as the large investor interest in distressed homes, one could reasonably conclude that the pace of foreclosures could accelerate.

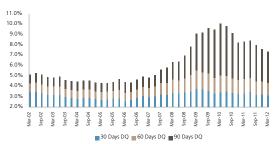
#### The Questions

**Housing starts & permits** – At an annualized figure of 760,000, single family housing starts are approximately 50% below long-term averages. There has been considerable excitement in the market as annualized total housing starts have increased 59% from April 2009's trough of 478,000. However, we would note that a significant portion of the increase in starts since this time has been driven by the multifamily market – starts up 166% as opposed to single family – starts up 39% (Chart 21). UBS' forecast for housing starts is 800,000 in 2012 and 900,000 in 2013. The question to be answered is how much of the increase will ultimately be driven by single family vs. multifamily. One potential positive is that both starts and permits for single family homes have increased from 2009's depressed levels (Chart 22).

**Household formations** – Household formations declined significantly during the financial crisis, well below long-term averages, and have just begun to recover (Chart 23). The degree to which household formations recover and what percentage of the households become owners vs. renters will have a significant impact on the housing market.

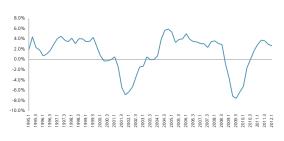
**First time buyers** - As can be seen in Chart 24, the percentage of first time home buyers (as a % of total buyers) has declined precipitously since early 2009. Given the high levels of negative and limited home equity we discussed previously, we believe a larger pool of first time buyers will be required to keep the housing recovery on track. The question is - will bank lending standards relax sufficiently to provide greater credit access. In addition, will first time home buyers have sufficient capital for a down payment?

**Chart 10 - Mortgage Delinquency Trends** 



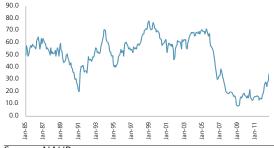
Source: MBA

**Chart 11 - National Multifamily Rent Trends** 



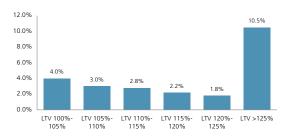
Source: CBRE

Chart 12 - National Association of Homebuilders Housing Market Index



Source: NAHB

Chart 13 - Negative Equity as of 1Q 2012



Source: Corelogic

**Investor & Cash buyers** – Since the downturn began investor-oriented buyers have accounted for between 10% and 25% of home purchases while cash buyers have accounted for between 15% and 35% of home purchase (Charts 25 & 26 respectively). We recognize that there is likely substantial overlap between the two categories . Two questions we would ask are: 1) as prices recover will investors buyers retreat from the market? 2) should home prices recover quickly will investor buyers seek to sell their investments earlier than originally intended, thus bringing additional supply to the market?

**Distressed sales composition & price gap -** The percentage of sales representing distressed sales has declined approximately 50% since 2009 to 25% of sales (Chart 27). Interestingly, foreclosures still represent the larger portion of distressed sales. It appears banks are still hesitant to ramp up the level of short sales. In addition, the recent burst of housing activity has helped narrow the gap between distressed and non-distressed sales prices (Chart 28). The outstanding questions are 1) will the recent rebound in housing activity bring more distressed inventory to the market? 2) if the answer to the first question is yes, will the increased level of inventory lead to a widening of price discounts?

**Household Income** - Per Chart 29, historically there has been a strong relationship between the direction of household income and home prices. As can be seen in the chart, median household income growth turned positive in 2011 and, as discussed previously, we have begun to see positive movement in several national home prices indices. The question is will household incomes continue to increase and, if so, what will the trajectory be? Given the ongoing slack in the employment market, can wages grow sufficiently to justify further increases in home prices? Although we believe the generation low mortgage rates and high levels of affordability will be tailwinds for home prices, we do believe continued income growth will be necessary for this trend to continue.

The relationship between home prices and income clearly broke down during the formation and subsequent bursting of the housing bubble. As the housing market begins to stabilize and normalize, we believe a properly functioning mortgage market and underwriting cycle, combined with growth in household incomes, will be essential for sustained growth in home prices.

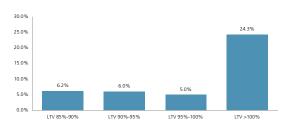
**Listings, prices & negative equity -** As we discussed previously the months supply of homes on the market has declined substantially. This has certainly helped stabilize prices and create the impression of a scarcity of supply. Although we would agree that reduced supply in a number of markets has helped buoy prices, we do question the motivation driving this phenomenon. Chart 30 on page X examines the relationship between the YOY change in home prices vs. the YOY change in for-sale listing for a number of metropolitan statistical areas (MSA) in the U.S. Not surprisingly, each market (with the exception of Chicago) showed a very positive relationship between these two variables. However, taking the analysis one step further, there is a strong relationship between the level of negative equity and the decline in for-sale listings in these MSAs (Chart 31 on page X).

**Chart 14 - Negative Equity Time Series** 



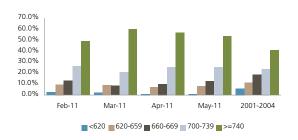
Source: Corelogic

Chart 15 - Negative and Limited Equity as of 1Q 2012



Source: Corelogic

**Chart 16 - Agency FICO Score Trends** 



Source: FHFA, NAR

**Chart 17 - National Homeownership Rates** 



Source: U.S. Census

The logical question is - how much of the decline in listings has been driven by the preponderance on negative equity in many of these MSAs that has effectively prevented people from selling. The other logical questions is - as these markets improve, will it reduce the level of negative equity which will bring this supply back on the market?

**Demographic trends** – The largest growth segment in the population is the 65+ age cohort, where homeownership rates are in excess of 80%. For the population between 35 and 44 years old homeownership rates are 65% (roughly the national average). In contrast, the homeownership rate of the 35 year old and younger cohort is 39%. Will the dynamics of the sub 35 year old demographic be sufficient to pick up the slack in housing?

**Regulation** – Many aspects of the Dodd/Frank financial reform bill have yet to be finalized, including the provisions surrounding Qualified Mortgages. Will the extended implementation time for the bill further exacerbate the dearth of mortgage availability?

**Political considerations** - Over the past several years housing policy has become increasingly politically motivated. This trend has certainly been exacerbated by the upcoming election season. The myriad housing stimulus programs to date have ranged in effectiveness from negligible to modest. A number of more aggressive proposals have been floated by various constituencies including widespread principal reduction on agency-backed mortgages, use of eminent domain to refinance underwater mortgages and large scale deed-for-lease programs. The politically charged nature of some of the proposals makes implementation uncertain.

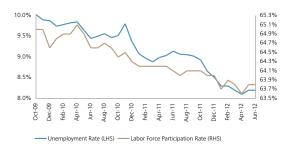
Thanks to Matthew Kann for his contributions to this report.

Chart 18 - The Impact of More Stringent Appraisals



Source: NAR

Chart 19 - U.S Unemployment & Workforce Participation Rates



Source: BLS

**Chart 20 - Monthly Foreclosure Trends** 



Source: Realtytrac

Chart 21 - Indexed Single & Multifamily Housing Starts



— SF Starts (Indexed) — N

Source: U.S. Census

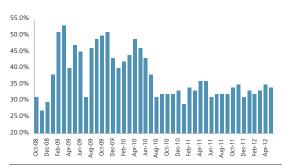
#### Real estate markets

Chart 22 - Single Family Starts & Permits From January 2009



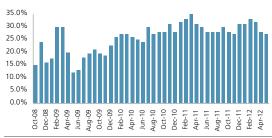
Source: U.S. Census

Chart 24 - First Time Buyers as a % of Total Buyers



Source: NAR

Chart 26 - Cash Buyers as a % of Home Purchases



Source: NAR

**Chart 28 - Distressed Sales Price Discount Trends** 



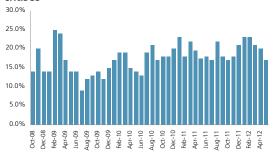
Source: NAR

**Chart 23 - Household Formation Trends** 



Source: U.S. Census

Chart 25 - Investor Buyers as a % of Home Purchases



Source: NAR

**Chart 27 - Distressed Sales Composition Trends** 



Source: NAR

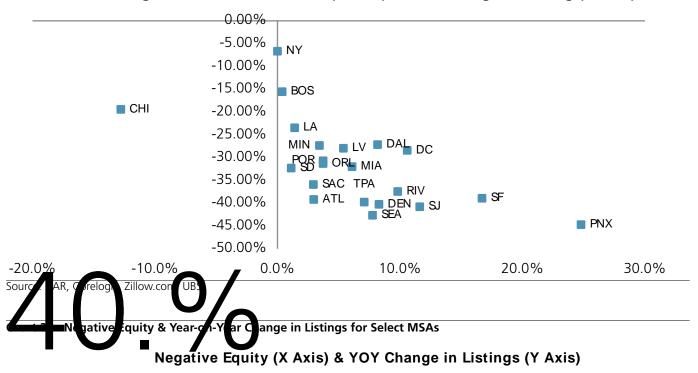
Chart 29 - Median Household Income & Median Existing Home Prices

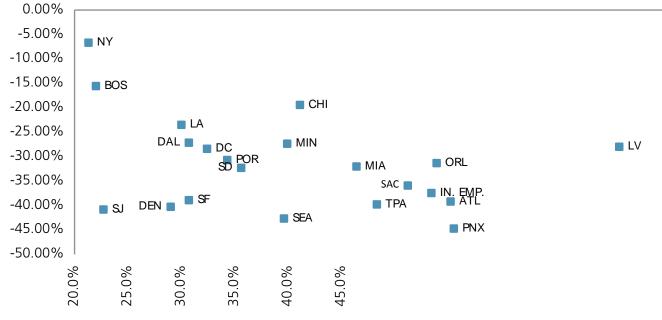


Source: U.S. Census, BLS

Chart 30 - Year-on-Year Change in Median Home Prices & Listings for Select MSAs

#### YOY Change in Median Home Price (X Axis) & YOY Change in Listing (Y Axis)





#### Real estate markets

### **Appendix**

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